

Amendments to the Drawings:

The attached drawing sheet(s) include changes to Figure(s) 2, 3, and 3A. In Figures 2, 3, and 3A, --Prior Art-- has been added to identify that which is old. In Figure 4, reference numbers 407 and 410 have been added to identify the data transfer 410, and virtual pre-fetch buffer 407, as described at least in the specification at paragraphs [0053-0055]. Similarly, in Figure 5, reference number 407 has been added to identify the virtual pre-fetch buffer 407.

REMARKS

Applicant respectfully requests reconsideration of this application in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in substantially the same order in which the corresponding issues were raised in the Office Action.

Status of the Claims

Claims 1-27 are pending. No claims are currently amended. No claims are canceled. No claims are added. No new matter has been added.

Summary of the Office Action

Claims 5-7 and 17-18 stand objected to as depending from a rejected independent claim, but would be allowable if rewritten in independent form to include all intervening claim limitations.

Claims 1-4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,260,096 to Eskandari et al. (hereinafter "Eskandari").

Claims 1-4, 8-16, and 19-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Eskandari.

Response to Objections

The drawings stand objected to because Figures 2, 3, and 3A should be designated by a legend such as --Prior Art--. In particular, the Office Action states that because only that which is old is illustrated. Applicant respectfully submits that Figures 2, 3, and 3A have been amended to include a legend, --Prior Art-- as suggested by the Examiner. Applicant appreciates the Examiner's recommendation and respectfully requests that the objection to the drawings be withdrawn.

Response to Rejections under 35 U.S.C. § 102(b)

The Office Action rejected claims 1-4 under 35 U.S.C. § 102(b) as being anticipated by Eskandari. Applicant respectfully requests withdrawal of these rejections because the cited reference fails to disclose all of the limitations of the claims.

CLAIMS 1-4

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Eskandari. Applicant respectfully submits that claim 1 is patentable over the cited reference because Eskandari does not disclose all of the limitations of the claim. Claim 1, as amended, recites:

A method for performing a delayed transaction, comprising:
receiving a read request from a PCI (Peripheral Component Interconnect) agent coupled to a PCI bridge;
allocating a pre-fetch buffer for the delayed transaction;
setting a buffer fill watermark for the pre-fetch buffer;
transferring data into the pre-fetch buffer while monitoring a fill level of the pre-fetch buffer; and
enabling data to be transferred from the pre-fetch buffer to the PCI agent once the fill level of the pre-fetch buffer meets or exceeds the buffer fill watermark. (Emphasis added).

Applicant respectfully submits that Eskandari fails to disclose all of the limitations of the claim. In particular, Eskandari does not disclose setting a buffer fill watermark for the pre-fetch buffer.

Eskandari is directed to an electronic systems having a bridge, and more particularly to bridge architectures for handling multiple write transactions simultaneously. (Eskandari, col. 1, lines 6-9). The bridge of Eskandari includes two buffers, data queue and transaction queue, and a queue controller. Data queue is a buffer having a first in first out (FIFO) structure, receiving the write data for each transaction received by the slave logic. (col. 3, lines 11-12). Transaction queue is a specialized buffer having a FIFO structure, storing into a number of slots the assigned enqueued transactions. (col. 3, lines. 24-28). The queue controller manages the data and transaction queues using the transaction information and control information received by the slave logic. The queue controller provides and manages a number of pointers to location in the transaction and data queues. For example, a transaction queue head pointer indicates the slot in the transaction queue which contains the information needed to master the oldest enqueued transaction in the buffer. (col. 2, line 6 to col. 3, line 1). These two buffers operate with a FIFO structure, releasing slots in the data and transaction queues, which makes the slots available for new data and new transaction

information, as older transactions are mastered and completed. (col. 4, lines 16-19). Nothing in Eskandari discloses setting a buffer fill watermark for either buffer (e.g., the data or transaction queues). Moreover, Eskandari does not disclose transferring data into the pre-fetch buffer while monitoring a fill level of the pre-fetch buffer, nor enabling data to be transferred from the pre-fetch buffer to the PCI agent once the fill level of the pre-fetch buffer meets or exceeds the buffer fill watermark.

In contrast, claim 1 recites “**setting a buffer fill watermark for the pre-fetch buffer.**” For the reasons stated above, Eskandari fails to disclose all of the limitations of claim 1. In particular, Eskandari does not disclose setting a buffer fill watermark for the pre-fetch buffer. Given that the cited reference fails to disclose all of the limitations of the claim, Applicant respectfully submits that claim 1 is patentable over the cited reference. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Given that claims 2-4 depend from independent claim 1, which is patentable over the cited reference, Applicant respectfully submits that dependent claims 2-4 are also patentable over the cited reference. Accordingly, Applicant requests that the rejection of claims 2-4 under 35 U.S.C. § 102(b) be withdrawn.

Response to Rejections under 35 U.S.C. § 103(a)

The Office Action rejected claims 1-4, 8-16, and 19-27 under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art in view of Eskandari. Applicant respectfully requests withdrawal of these rejections because the combination of cited references fails to disclose all of the limitations of the claims.

CLAIMS 1-4

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art in view of Eskandari. Applicant respectfully submits that claim 1 is patentable over the combination of cited references for reasons similar to those presented above with respect to claim 1. In particular, the cited references fail to disclose “setting a buffer fill watermark for the pre-fetch buffer,” as recited in claim 1. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 2-4 depend from independent claim 1, which is patentable over the cited references, Applicant respectfully submits that dependent claims 2-4 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 2-4 under 35 U.S.C. § 103(a) be withdrawn.

CLAIMS 8-15

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art in view of Eskandari. Applicant respectfully submits that claim 8 is patentable over the combination of cited references for similar reasons as presented above with respect to claim 1. In particular, the cited references fail to disclose the first pre-fetch buffer having a first buffer fill threshold. Accordingly, Applicant requests that the rejection of claim 8 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 9-15 depend from independent claim 8, which is patentable over the cited references, Applicant respectfully submits that dependent claims 9-15 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 9-15 under 35 U.S.C. § 103(a) be withdrawn.

CLAIMS 16, AND 19-23

Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art in view of Eskandari. Applicant respectfully submits that claim 16 is patentable over the combination of cited references for reasons similar to those presented above with respect to claim 1. In particular, the cited references fail to disclose the first pre-fetch buffer having a first buffer fill threshold. Accordingly, Applicant requests that the rejection of claim 15 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 19-23 depend from independent claim 16, which is patentable over the cited references, Applicant respectfully submits that dependent claims 19-23 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 19-23 under 35 U.S.C. § 103(a) be withdrawn.

CLAIMS 24-30

Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over admitted prior art in view of Eskandari. Applicant respectfully submits that claim 24 is patentable over the combination of cited references for reasons similar to those presented above with respect to claim 1. In particular, the cited references fail to disclose the first pre-fetch buffer having a first buffer fill threshold. Accordingly, Applicant requests that the rejection of claim 24 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 25-30 depend from independent claim 24, which is patentable over the cited references, Applicant respectfully submits that dependent claims 25-30 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 25-30 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION


It is respectfully submitted that in view of the amendments and remarks set forth herein, the rejections and objections have been overcome. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact Michael Mallie at (408) 720-8300.

If there are any additional charges, please charge them to Deposit Account No. 02-2666.

Respectfully submitted,

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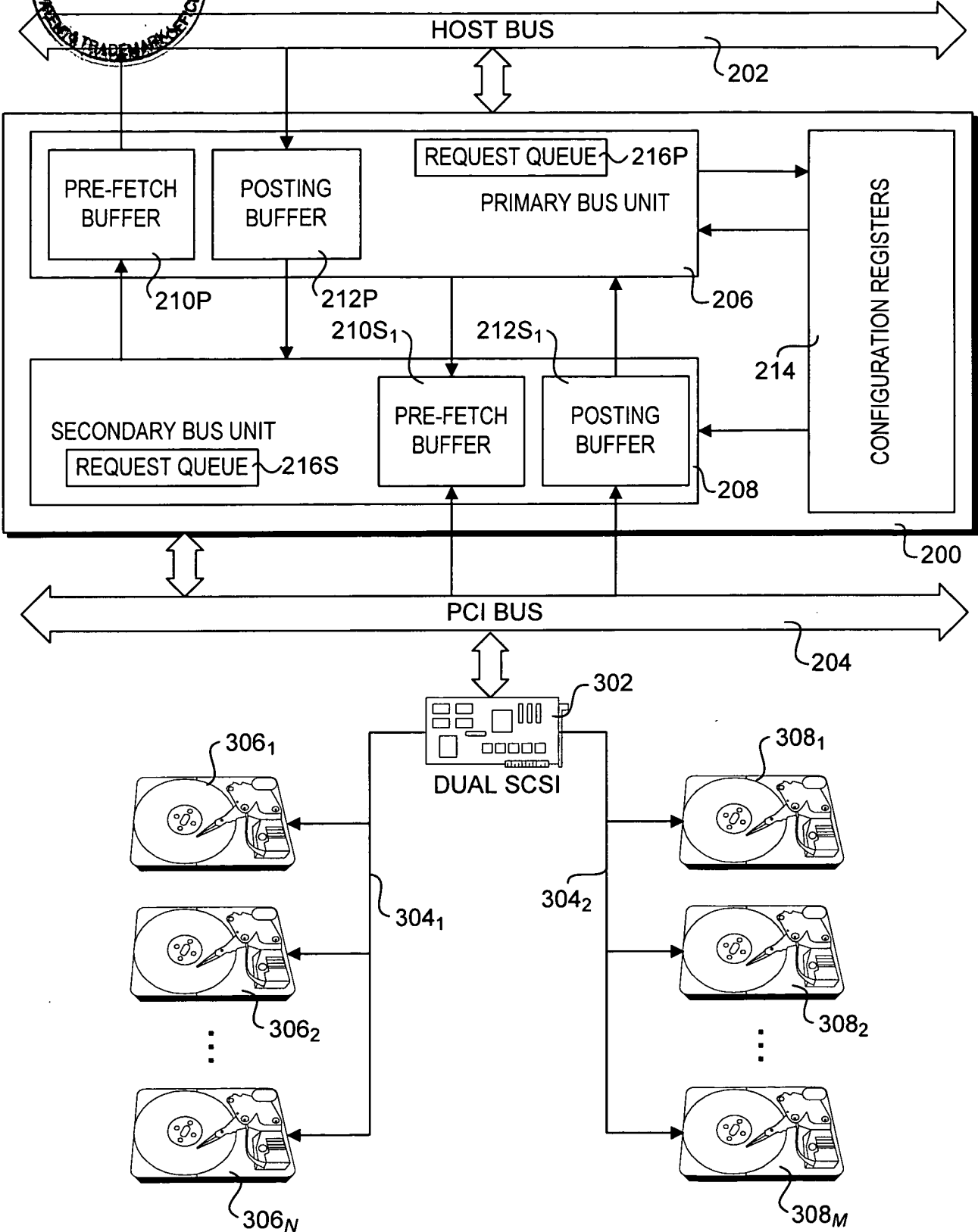


Fig. 3
(Prior Art)

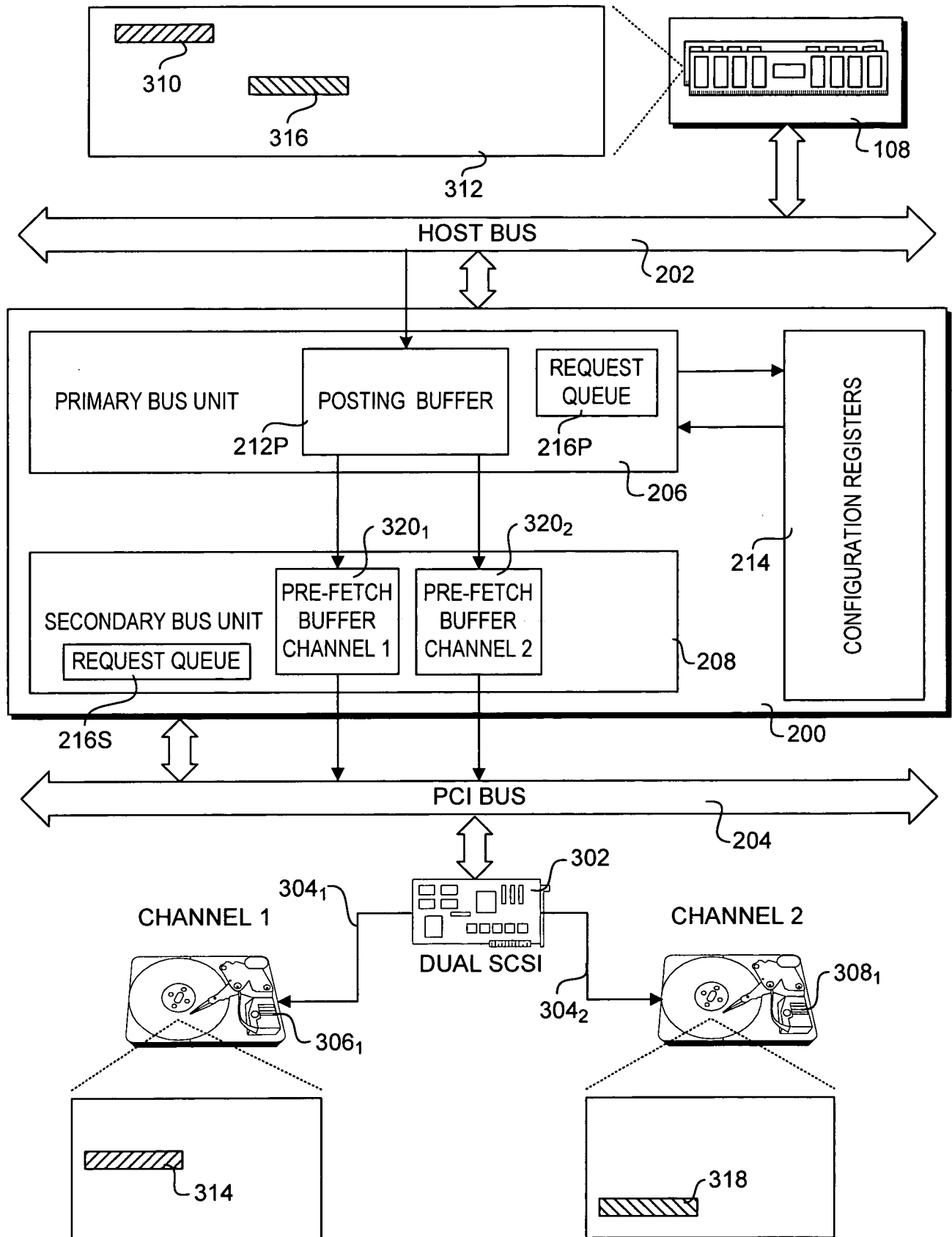


Fig. 3a
(Prior Art)

